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Bibliography

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[Name] Matsuura Kita man
[Theme code (reference)]
2C088
[F term (reference)]
2C088 AA31 AA33 AA36 BC22 EB24 EB48

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[Translation done.]

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Summary

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(57) [Abstract]
[Technical problem] The operation mode which was rich in change which stimulates
the hope for great success is realized.
[Means for Solution] a game face-of-a-board top — hitting — the probability
renewal field 31 — having — the sphere passage to this hit probability renewal field
31 — following — a usual state — or since hit probability is renewed and the
probability which is becoming it a great success changes with the lottery results of
the hit probability selection random number W at any time, the operation mode which
results in great success is rich in change

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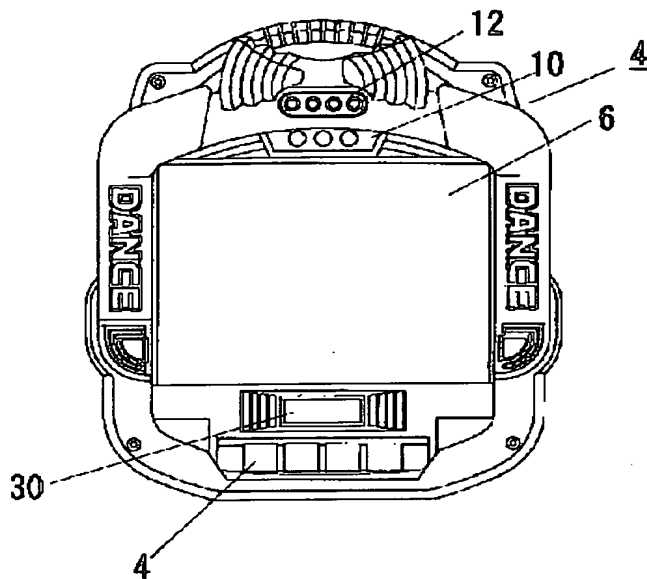3.In the drawings, any words are not translated.

## CLAIMS

[Claim(s)]
[Claim 1] In the pachinko game machine which was made to perform the special game operation which will supply a game person with predetermined gain when the combination of each pattern by which was equipped with the following and a definite indication was given at pattern display was a predetermined hit pattern mode The pachinko game machine which is equipped with a probability renewal field in a game face-of-a-board top, and is characterized by renewing the hit probability that a definite indication of the pattern mode will be given in pattern display, with the sphere passage to this hit probability renewal field. Pattern display which indicates two or more patterns by change Pattern control means which originate in the game sphere passage to a pattern starting field, carry out the change start of the pattern,

and stop and carry out pattern decision

[Claim 2] In the pachinko game machine which was made to perform the special game operation which will supply a game person with predetermined gain when the combination of each pattern by which was equipped with the following and a definite indication was given at pattern display was a predetermined hit pattern mode The pachinko game machine which is equipped with a probability renewal field in a game face-of-a-board top, casts lots in a hit probability selection random number with the sphere passage to this hit probability renewal field, and is characterized by renewing the hit probability that a definite indication of the pattern mode will be given by the lottery result in pattern display. Pattern display which indicates two or more patterns by change Pattern control means which originate in the game sphere passage to a pattern starting field, carry out the change start of the pattern, and stop and carry out pattern decision

[Claim 3] In the pachinko machine which was usually made to carry out the open drive of the electric accessory when the combination of each pattern by which was equipped with the following and a definite indication was usually given at pattern display was a predetermined hit pattern mode Have a probability renewal field in a game face-of-a-board top, and with the sphere passage to this hit probability renewal field per [ by which a definite indication of the pattern mode is specially given in pattern display ] special pattern Probability, The pachinko game machine according to claim 1 characterized by the thing for which a definite indication of the pattern mode is usually given in pattern display, and which usually renewed probability per pattern. Two or more special pattern display which indicates the pattern by change specially The special pattern starting field which detects passage of a game sphere Originate in the game sphere passage to a pattern starting field specially, and carry out the change start of the pattern, and stop and it has the special pattern control means which carry out pattern decision. When the combination of each pattern by which a definite indication was given specially at pattern display is a predetermined hit pattern mode, while being made to perform the special game operation which will supply a game person with predetermined gain It has the common electric accessory which carries out opening-and-closing control of the pattern starting field specially, and they are two or more common pattern display which usually indicates the pattern by change. Common pattern control means which detect passage of a game sphere and which usually originate in the game sphere passage to a pattern starting field, usually carry out the change start of the pattern with a pattern starting field, and stop and carry out pattern decision

[Claim 4] In the pachinko machine which was usually made to carry out the open drive of the electric accessory when the combination of each pattern by which was equipped with the following and a definite indication was usually given at pattern display was a predetermined hit pattern mode It has a probability renewal field in a game fac -of-a-board top, and lots are cast in a hit probability selection random number with the sphere passage to this hit probability renewal field. by the lottery

result The pachinko game machine according to claim 2 characterized by probability and the thing for which a definite indication of the pattern mode is usually given in pattern display, and which usually renewed probability per pattern per [ by which a definite indication of the pattern mode is specially given in pattern display ] special pattern. Two or more special pattern display which indicates the pattern by change specially The special pattern starting field which detects passage of a game sphere Originate in the game sphere passage to a pattern starting field specially, and carry out the change start of the pattern, and stop and it has the special pattern control means which carry out pattern decision. When the combination of each pattern by which a definite indication was given specially at pattern display is a predetermined hit pattern mode, while being made to perform the special game operation which will supply a game person with predetermined gain It has the common electric accessory which carries out opening-and-closing control of the pattern starting field specially, and they are two or more common pattern display which usually indicates the pattern by change. Common pattern control means which detect passage of a game sphere and which usually originate in the game sphere passage to a pattern starting field, usually carry out the change start of the pattern with a pattern starting field, and stop and carry out pattern decision

[Claim 5] The pachinko game machine according to claim 3 or 4 usually made into the combination to which the probability of another side becomes low when one probability has a high combination of probability per pattern with probability per [ which is renewed ] special pattern.

[Claim 6] The pachinko game machine according to claim 1 to 5 characterized by arranging the hit probability viewing area which reports hit probability on the game face of a board.

[Claim 7] the closing position which covers this entrance on the entrance of a hit probability renewal field, and the open position which enables the inflow of the sphere from this entrance —— a positioning **** movable passage prevention member —— arranging —— movable passage prevention —— the pachinko game machine according to claim 1 to 6 characterized by enabling game sphere passage to a hit probability renewal field by the open position of a member

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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] this invention relates to the pachinko game machine which was made to perform the special game operation which will supply a game person with predetermined gain, when the combination of each pattern by which a definite indication was given at pattern display is a predetermined hit pattern mode.
[0002]
[Description of the Prior Art] It has the pattern display which indicates two or more patterns by change, and the pattern control means which originate in the game sphere passage to a pattern starting field, carry out the change start of the pattern, stop, and carry out pattern decision, and when the combination of each pattern by which a definite indication was given at pattern display is a predetermined hit pattern mode, the pachinko game machine it was made to perform the special game operation a grant will be made in predetermined gain is well known by the game person. There are the so-called 1st sort pachinko game machine and a 3rd sort pachinko game machine in these.
[0003] The pattern display which possesses two or more pattern displays to which the 1st sort pachinko game machine indicates the pattern by change here, It has adjustable winning-a-prize equipment possessing the adjustable winning-a-prize mouth in which opening-and-closing control is carried out by the piece of opening and closing. Originate in the game sphere passage to the special pattern starting field established in the game face of a board, and the change start of the indicator-chart handle is carried out. When it stops, it has the pattern control means which carry out pattern decision and a definite indication of the predetermined hit pattern mode is given at pattern display, opening of the adjustable winning-a-prize mouth of adjustable winning-a-prize equipment, It makes into continuation conditions for a game sphere to pass through the specific field in which the opening-and-closing round which comes to generate synizesis of the adjustable winning-a-prize mouth by progress of the predetermined time limit of an adjustable winning-a-prize mouth or winning-a-prize expiration of the convention number within this predetermined time limit one by one was prepared in the adjustable winning-a-prize mouth. The special game operation which it comes to repeat to the number of times of a predetermined limit is performed.
[0004] Moreover, the pattern display with which the 3rd sort pachinko game machine indicates the pattern by change, The pattern starting field which detects sphere

passage, and the common electric accessory which carries out opening-and-closing control of the opening, and is specially changed into an operating space at the state of the interior in which sphere passage is possible, and an impossible state, Have the adjustable winning-a-prize mouth by which opening-and-closing control is carried out, have the accessory which performs inflow control to the specific field which opens this adjustable winning-a-prize mouth with sphere passage, and it originates in the game sphere passage to a pattern starting field. After fluctuating the pattern of pattern display, are made to give a definite indication, and when the definite pattern mode is a predetermined hit pattern mode Open control of the electric accessory is usually carried out, and a game operation is specially performed with the sphere passage to the special operating space. and this special game operation It comes to repeat the opening-and-closing round which an accessory drives, and the sphere passage of to a specific field is attained, and comes to generate opening of an adjustable winning-a-prize mouth, and synizesis for this the sphere passage of every two or more times.

[0005]
[Problem(s) to be Solved by the Invention] In the conventional pachinko game machine, when it is becoming it a great success in this probability change pattern mode by making the predetermined thing of the great success pattern modes into a probability change pattern mode, various pachinko machines which maintained the probability to next great success to high probability are proposed. and as a conventional pachinko machine with which this kind of probability is changed When a halt indication of the probability change pattern mode is given, until a halt indication of the pattern of a predetermined mode is given next time There are a model which changes into the great success random number of the usual probability, and substitutes the great success random number of high probability, and a model which casts lots in the usual great success random number or the usual great success random number of high probability of probability, and uses the great success random number of a lottery result when a halt indication of the probability change pattern mode is given. All are usually casting lots in probability and high probability by one half in general. Moreover, the random number of high probability is usually being fixed to one less than 10 times [ of probability ] kind.

[0006] By the way, if it is in the control mentioned above, probability is changed after the end of the special game operation a condition [ a great success pattern mode and a bird clapper ], it will usually only go on by the random number of probability, and either of the high probability of constant value to generating of the following great success pattern mode, therefore will be deficient in change, and a game person will spend monotonous time to great success next time.

[0007] this invention generates the probability state which was rich in change which stimulates the hope for great success, produces various operation modes, and aims at offering the pachinko machine which may increase the interest of a game by this.

[0008]

[Means for Solving the Problem] this invention originates in the pattern display which indicates two or more above-mentioned patterns by change, and the game sphere passage to a pattern starting field, and carries out the change start of the pattern. When the combination of each pattern by which stopped, and was equipped with the pattern control means which carry out pattern decision, and a definite indication was given at pattern display is a predetermined hit pattern mode In the pachinko game machine which was made to perform the special game operation which will supply a game person with predetermined gain It has a probability renewal field in a game face-of-a-board top, and is characterized by renewing the hit probability that a definite indication of the pattern mode will be given in pattern display, with the sphere passage to this hit probability renewal field.

[0009] If it is in this composition, the probability which is becoming it a great success changes with the sphere passage to a hit probability renewal field. For this reason, hit ball operation which a game sphere passes to a hit probability renewal field will be performed at the time of low probability, and a hit probability renewal field will be avoided, hit ball operation will be performed at the time of high probability, and strategy nature is produced in hit ball operation. Moreover, probability will always change, will drive excitement and disappointment of a game person, and serves as a game which was rich in change, and the interest of a pachinko game improves.

[0010] Here, it has a probability renewal field in a game face-of-a-board top, lots are cast in a hit probability selection random number with the sphere passage to this hit probability renewal field, and the composition which renewed the hit probability that a definite indication of the pattern mode would be given by the lottery result in pattern display is also proposed. Since the probability which is becoming it a great success by the lottery of a hit probability selection random number changes at any time if it is in composition, caring about change of great success probability, a game person will perform a game and does not divert mind to advance of a game. Moreover, since the hit probability selection random number is used, a game person produces the fun which cannot carry out learning of the selection result beforehand. Moreover, it becomes the optimal composition when it provides much hit probability. Furthermore, two or more special pattern display which indicates the pattern by change specially and the special pattern starting field which detects passage of a game sphere, Originate in the game sphere passage to a pattern starting field specially, and carry out the change start of the pattern, and stop and it has the special pattern control means which carry out pattern decision. When the combination of each pattern by which a definite indication was given specially at pattern display is a predetermined hit pattern mode, while being made to perform the special game operation which will supply a game person with predetermined gain It has the common electric accessory which carries out opening-and-closing control of the pattern starting field specially. Two or more common pattern display which usually indicates the pattern by change, With the common pattern starting field

which detects passage of a game sphere, usually originate in the game sphere passage to a pattern starting field, and the change start of the pattern is carried out. In the pachinko machine which stopped, and was usually made to carry out the open drive of the electric accessory when the combination of each pattern which carries out pattern decision, and by which was usually equipped with pattern control means and a definite indication was usually given at pattern display was a predetermined hit pattern mode Have a probability renewal field in a game face-of-a-board top, and with the sphere passage to this hit probability renewal field per [ by which a definite indication of the pattern mode is specially given in pattern display ] special pattern Probability, The composition by which a definite indication of the pattern mode is usually given in pattern display and which usually renewed probability per pattern is proposed.

[0011] That is, if the combination of probability is usually specially set up per pattern with probability per pattern beforehand and a game sphere passes to a probability renewal field, the thing of one of combination will be selected, and this usually renews probability simultaneously per pattern with probability per pattern specially.

[0012] The composition by which a definite indication of the pattern mode is given [ in / pattern display / usually / per special pattern in which similarly it is in this pachinko game machine, lots are cast in a hit probability selection random number with the sphere passage to a hit probability renewal field, and a definite indication of the pattern mode is given / in / pattern display / specially ] by the lottery result ] with probability and which usually renewed probability per pattern is also proposed.

[0013] Here, per [ which is renewed ] special pattern, usually, per pattern, when one probability of the combination of probability is high, it can consider as the combination to which the probability of another side becomes low with probability. Namely, equate the last probability which carries out opening-and-closing control of the pattern starting field specially of usually resulting [ from opening of an electric accessory ] in great success, and the open frequency of an electric accessory is usually made high. With an operation mode with the probability low while change of a pattern occurs frequently specially that a pattern will serve as a great success mode specially, usually, an electric accessory makes it be hard to be opened wide, and while the change frequency of a pattern is extraordinarily low, the probability that a pattern will serve as a great success mode specially is renewed by either of the high states. A big difference will be produced in progress although the gains with which a game person is finally supplied by this do not differ, until they are becoming it a great success, and the game form which was rich in change will be realized.

[0014] It is in each of this composition and the hit probability viewing area which reports hit probability can be arranged on the game face of a board. By this, a game person can carry out learning of the present probability state, challenge volition will be stimulated or various feeling, such as disappointment and impatience, will be induced.

[0015] moreover, the closing position which covers this entrance on the entrance of

a hit probability renewal field and the open position which enables the inflow of the sphere from this entrance ―― a positioning **** movable passage prevention member ―― arranging ―― movable passage prevention ―― you may be made to enable game sphere passage to a hit probability renewal field by the open position of a member this movable passage prevention ―― it is proposed that the position control of a member is based on time control For example, since a predetermined time maintains to this probability, it hits considering a movable passage prevention member as a closing position, passage of the game sphere to a probability viewing area is made impossible, and the composition which changed and hit open position after predetermined-time progress, and enabled passage of the game sphere to a probability viewing area is proposed by after probability change. this movable passage prevention ―― if timing suits as a position control means of others of a member as advance and evacuation are repeated for every predetermined time, it will be made to enable passage of the game sphere to a hit probability viewing area, or lots will be cast in an opening-and-closing random number to predetermined timing using an opening-and-closing random number, and the composition of making it become any of advance and evacuation of a movable passage prevention member to be by the result etc. will be proposed

[0016]

[Embodiments of the Invention] One example which applied this invention to the so-called 1st sort pachinko game machine is explained. Drawing 1 is the front view of the game board 1 of a pachinko game machine. Moreover, drawing 2 is the front view of the pin center,large case 4 arranged in the center in the inner rail of the game board 1. In the pin center,large case 4, the special pattern display 6 which consists of a liquid crystal display, a CRT display machine, a dot matrix, or a 7 segment indicator is formed here. Three special patterns A, B, and C are displayed on the viewing area F of this special pattern display 6. The pattern which these special patterns A, B, and C turn into from the number of 10 of "0" – "9" is displayed.

[0017] The starting storage numeral equipment 8 which consists of four pilot lamps is formed in the lower part of the pin center,large case 4. This starting storage numeral equipment 8 displays the number of spheres memorized by the starting storage of the storage RAM shown by drawing 3 constituted by the field in part. Furthermore, the common pattern display 10 which consists of three Light Emitting Diodes is arranged in the upper part of the pin center,large case 4. This three Light Emitting Diode blinks one by one, and displays the lighting mode of various combination. And when this lighting mode is a predetermined hit mode, the below-mentioned common electric winning-a-prize mouth 15 is opened. You may be this thing that constitutes as pattern display 10 with a liquid crystal display, 1 or two or more 7 segment indicators, etc., hits and usually determines a blank according to the contents of a display.

[0018] Furthermore, usually, the common pattern starting storage numeral equipment 12 which consists of four pilot lamps is formed, and by making a

predetermined number into an upper limit, the sph re detecting signal from the aforementioned common pattern starting switch displays the number of storage on the right above position of the pattern display 10, when [ of Storage RAM ] a part is memorized to a field.

[0019] On the other hand, the pattern operation gates (usually pattern starting field) 13 and 13 are usually formed, and if a sphere detecting signal occurs from the common starting switch S2 (refer to drawing 3 ) built in these common pattern operation gates 13 and 13 by passage of a game sphere, the pattern display 10 will usually carry out pattern change at the lower both sides of the pin center,large case 4.

[0020] Moreover, the common electric winning-a-prize mouth 15 to which it was made to change the degree of opening of a starting field (winning-a-prize mouth combination) by the piece of opening-and-closing wings is specially arranged in the directly under position of the pattern display 6 by making the interior into the pattern starting field 14. And usually, in the case of a predetermined hit state which the display result of the pattern display 10 mentioned above, the piece of opening-and-closing wings is extended for about 0.2 seconds, the degree of opening of the pattern starting field 14 is made to extend specially to it, and it will be in the state where a sphere tends to enter. Usually, into the electric winning-a-prize mouth 15, with have pattern starting switch S1 (refer to drawing 3 ) specially, and according to this starting switch S1 sphere passage detection, such as a photoelectric switch and a limit switch, the special patterns A, B, and C of the pattern display 6 will indicate by change, and the predetermined pattern will be specially indicated by halt.

[0021] Usually, below, the specific field and the adjustable winning-a-prize mouth 23 which usually has a field of the electric winning-a-prize mouth 15 are arranged inside, and the adjustable winning-a-prize equipment 22 which changes the adjustable winning-a-prize mouth 23 into an open state or a closing state is further arranged by carrying out opening-and-closing control of the piece 24 of opening and closing by the large winning-a-prize mouth opening solenoid (referring to drawing 3 ). And if a game sphere enters to a specific field while the piece 24 of opening and closing will open, and the upper surface of the piece 24 of opening and closing will produce a guidance operation in the state of the opening and showing around a game sphere to the adjustable winning-a-prize mouth 23, if the pattern display 6 is displayed in a predetermined combination and is becoming it a great success specially, it will become that the shift to the next opening-and-closing round is possible, a continuation opening operation will be generated, and a game person will be presented with predetermined gain. This adjustable winning-a-prize equipment 22 performs the special game operation mentioned later, and as drawing 3 shows, the specific field switch S3 which detects the game sphere included in the specific field, and the winning-a-prize sphere detection switch S4 which carries out counting of the winning-a-prize number under great success are formed in the interior. An accessory continuation operation switch is equipped also with the function as a

count switch which carries out counting of the sphere which went into the specific field with the specific field switch S3 here.

[0022] Next, it explains per composition of the important section of this invention. The hit probability viewing area 30 which reports a lottery result is arranged in the right above position of starting storage numeral equipment 8 of the lower part of the aforementioned pin center,large case 4. This hit probability viewing area 30 is constituted by a liquid crystal display, dot-matrix display, etc.

[0023] Furthermore, usually, it becomes the both-sides position of the pin center,large case 4 of the electric winning-a-prize mouth 15 from the passage gate, it is corresponded to, and the probability renewal field 31 is arranged in it. The sphere detection sensor 32 is formed and it is made to detect game sphere passage, as drawing 4 shows in this hit probability renewal field 31. And hit probability will be renewed with the sphere passage detection by this sphere detection sensor 32 so that it may mention later. This renewed probability is displayed on the above-mentioned hit probability viewing area 30, and is reported to a game person.

[0024] Next, it explains per operation of the above-mentioned pachinko game machine. If a game sphere flows from the pattern starting field 14 specially, the pattern display 6 will drive specially with supply of a prize sphere. In addition, when it passes continuously, the sphere detection by the starting switch is memorized by starting storage (RAM), and based on the storage, Light Emitting Diode of starting storage numeral equipment 8 lights up one by one, and is suspended a maximum of 4 times as mentioned above. Whenever a pattern carries out the change start of this Light Emitting Diode, the light is put out and the number of storage decreases.

[0025] If Patterns A, B, and C will carry out a change start according to predetermined pattern permutation specially if the pattern display 6 drives specially, and they pass about 6.5 seconds or more in usual, pattern change will stop in order of Patterns A, B, and C specially. And if it becomes with the great success pattern mode which was selected with the hit probability selection random number W which Patterns A, B, and C mention later specially and which hit and was defined in the pattern mode, while great success will generate and a sound generator (refer to drawing 3 ) will emit a fanfare, a game operation is started specially, a large winning-a-prize mouth opening solenoid (refer to drawing 3 ) drives, the piece 24 of opening and closing tilts ahead, the adjustable winning-a-prize mouth 23 is opened wide, and an opening-and-closing round is performed This opening-and-closing round is continued until the predetermined time limit (30 seconds) passes or winning-a-prize detection of ten game spheres is made by winning-a-prize sphere detection switch S4 within this predetermined time limit. Moreover, as mentioned above, when it passes through the specific field of the adjustable winning-a-prize mouth 23 and the specific field switch S3 turns on, the probability to the next opening-and-closing round is satisfied, the piece 24 of opening and closing once carries out a synizesis drive, and one round is completed. And the adjustable winning-a-prize mouth 23 opens wide again after the end of operation, and it shifts to the next opening-and-

closing round. Thus, an opening-and-closing round is repeated a maximum of 16 times, the continuation opening operation of the adjustable winning-a-prize mouth 23 is produced, and a game person is presented with predetermined gain. An accessory continuation operation switch is equipped also with the function as a count switch which carries out counting of the sphere which went into the specific field with the specific field switch S3 here. The aforementioned sound generator is connected to a central control unit CPU, it outputs to amplifier in response to sound data, and, thereby, singing is emitted by each loudspeaker.

[0026] It is specially constituted by the above-mentioned game control unit 80 (microcomputer system) which usually consists of pattern display 6, a central control unit CPU which shows the pattern control means of the pattern display 12 by drawing 3 . It explains per this composition and control mode.

[0027] This central control unit CPU performs control action in a predetermined procedure, and the storage ROM which stores a program of operation, and the storage RAM which can write required data at any time are connected. Fixed data, such as a voice generating pattern for making Storage ROM generate a control program, a random number table, a great success game pattern and a lamp, the display pattern of Light Emitting Diode, the sound effect from a loudspeaker, etc., are memorized. And various kinds of random numbers mentioned above are stored in the aforementioned random number table, and, thereby, each lottery is made along with each above-mentioned step.

[0028] Moreover, the special pattern starting switch S1 prepared in the pattern starting field 14 through input port at the central control unit CPU, the common pattern starting switch S2, the specific field switch (accessory continuation operation switch) S3, and winning-a-prize sphere detection switch S4 It connects, and the signal sent out from each switch is shaped in waveform by the waveform shaping circuit, it is told to a central control unit CPU as input data, and the information is memorized by Storage RAM. The work area of the storage area which memorizes temporarily the data which set the halt display mode of the special patterns A, B, and C specially displayed with the pattern display 6 to Storage RAM, the register field which constitutes a soft timer, and the game control unit 80 etc. is prepared. The address bus (not shown) which, on the other hand, tells a target the information which specifies the address which write data to be memory, and a central control unit CPU, Storage ROM and RAM and the data bus that performs an exchange of data are connected to this storage RAM. Furthermore, in the storage area of Storage RAM, they are the pattern starting switch S1 and the common pattern starting switch S2 specially. The sphere detection signal of a shell is memorized considering the predetermined number (four pieces) as a limit.

[0029] Furthermore, peripheral devices, such as the pattern control unit 81 controlled through an output port, various solenoids mentioned above, the starting storage numeral equipments 8 and 12, and an ornament lamp, Light Emitting Diode, are connected to a central control unit CPU. The pattern control unit 81 usually

performs display execution of the pattern display 10 while performing the pattern change mode specially performed on the screen of the pattern display 6 with a central control unit CPU etc., and it constitutes pattern control means and common pattern control means specially. It has CPU for a LCD adjustable display, and a driver, the special pattern display 6 which becomes the driver from a liquid crystal display is connected, and it is made for this special pattern control unit 81 to control the pattern. Fixed data, such as an adjustable indicative data to a liquid crystal display (specially pattern display 6), its display pattern, and a great success display mode, are memorized by the storage which this pattern control unit 81 does not illustrate.

[0030] In addition, as mentioned above, the sound generator outputted to amplifier in response to sound data is connected to the central control unit CPU. Furthermore, the timer TM which measures time until the ten convention numbers carry out winning-a-prize expiration from the start of a game operation specially is connected so that it may mention later.

[0031] Next, it explains per pattern control of the special pattern display 6 by the pattern control unit 81. The great success special random number K which consists of 600 coma of 0-599 is stored in the above-mentioned storage ROM. Here, in the time of low probability, K= 7,247,427 is [ the great success special random number K ] becoming it a great success. That is, great success probability is 3/600=1/200. Moreover, in the case of K= 7, and 37, 67, 97, 127, 157, 187, 217, 247, 277, 307, 337, 367, 397, 427, 457 and 487,517,547,577, it is becoming it a great success in the time of high probability. That is, great success probability is 20/600=1/30. And it becomes HAZURE except it.

[0032] Moreover, in Storage ROM, they are the great success pattern random number L, the HAZURE pattern random number Ma, Mb, and Mc. It is stored, and hits and a halt pattern and the becoming pattern are determined based on HAZURE. The reach random number N of 0-28 is stored in Storage ROM further again. This reach random number N a reach change mode with a different special change mode from the time of a non-reach state from having two or more kinds It is what determines whether to perform a reach operation in which reach change mode. In A= (B+1), it is chosen when the great success pattern random number L2 which is the Junko mode in A=B when the case of a great success pattern and the great success pattern random number L1 which is a HAZURE pattern and is a **** mode are selected is selected. As this special change mode, there are various change modes, such as reversal of an accelerating halt from long reach, low-speed scrolling, a reverse run, and a low-speed run and a pattern, for example. The probability selection random number W is stored in this storage ROM in other examples furthermore mentioned later.

[0033] Next, the pattern display mode which comes to use each above-mentioned random number is explained. First, the great success special random number K is selected at the same time a sphere passes through the pattern starting field 14, and

a hit or HAZURE is determined. In addition, when the number of starting storage displayed on starting storage numeral equipment 8 is full in this process (four pieces), even if a sphere passes through the pattern starting field 14, when it supposes that it is invalid or is under change, processing of carrying out piece addition of the number of starting storage is performed. And based on the sphere passage to this pattern starting field 14, or subtraction of the number of starting storage, the pattern display 6 is changed specially.

[0034] And lots are cast in the great success special random number K, and it is it becoming it a great success that this is a predetermined random number value. Here, in the time of low probability, great success probability is 1/200 as mentioned above. Moreover, in the time of high probability, it is 1/30. And when starting storage memorizes, while fluctuating Patterns A, B, and C specially with the storage digestion with generating of the sphere detection signal from a starting switch, a value is elected from the great success pattern random number L, and it hits corresponding to the probability, and a pattern is determined. Furthermore, lots are cast in the reach random number N, and it determines whether to perform a reach operation in which special change mode.

[0035] And the combination of the hit pattern mode which Pattern C carried out a pattern halt specially after performing the predetermined special operation form which considered as the reach state as carries out circulation change of the patterns A and B one by one specially, was stopped and became a same pattern or permutation pattern, and was specified with the reach random number N, and was beforehand determined with the great success pattern random number L expresses for Patterns A, B, and C specially, and it makes become a hit pattern mode. And it is "becoming it a great success", and the operation of above-mentioned adjustable winning-a-prize equipment 23 will be performed.

[0036] On the other hand, in not being a coma, while becoming HAZURE and fluctuating Patterns A, B, and C specially by K hitting, they are the HAZURE pattern random number Ma, Mb, and Mc. It elects one by one and the patterns A, B, and C are specially indicated by HAZURE. At this time, they are the HAZURE pattern random number Ma and Mb. When the pattern by which shell election was carried out turns into the same pattern or a permutation pattern, it is made to generate a reach operation, and when a hit pattern mode is obtained, a HAZURE pattern random number is reelected and it is made to become a HAZURE pattern mode again.

[0037] If it is with storage digestion of starting storage further on the other hand when indicating the pattern display by change, and there is a limit (usually four pieces) in the number of starting storage of starting storage and this number is exceeded, it will be invalid even if there is a sphere detection signal from a starting switch. For this reason, in order to lessen generating of the invalid sphere by which it is accompanied to the limit of such storage, the number of starting storage is wanted to be digested quickly. Then, short pattern change time is chosen

immediately after completing great success (specially game operation), and it is made to perform Patterns A and B and C per change shortening operation (reduction of working hours) rather than the usual pattern change time specially. That is, it is shortened at 2 seconds that the change fixed time (fixed time except the time which pattern doubling takes) of Patterns A, B, and C is usually 6 seconds specially.

[0038] Next, it usually explains per pattern operation. If a game sphere usually passes through the pattern starting gate 13, this game sphere will usually be detected by the starting switch (refer to drawing 3 ). If sphere detection is carried out by this common starting switch, the common pattern of the pattern display 10 will usually be changed. This common pattern consists of three Light Emitting Diodes, left red, inside green, and right red. Whenever [ this ] the sphere detection will usually be memorized by starting storage (RAM), Light Emitting Diode of pattern starting storage numeral equipment 12 will usually light up with digestion of the number of storage and a pattern will usually become a change start if sphere detection is usually carried out by the starting switch while the electric accessory 15 is usually opening while changing the pattern display 10 or, the light is put out, and the storage number is displayed. In addition, usually, the number of the maximum storage of pattern starting storage numeral equipment 12 is four pieces, and is repealed more than it.

[0039] Based on the starting storage usually displayed on starting storage numeral equipment 12 after the open operation end of the electric accessory 15, the pattern display 10 usually carries out a change start again after a change halt of the pattern display 10. If the pattern display 10 passes about 5 seconds or more after a change start, change will stop, if it is in the state which at least one Light Emitting Diode of one of right and left turned on, it will become a hit and the electric accessory 15 will usually be wide opened for about 2 seconds.

[0040] The pattern mode displayed when the pattern display 10 usually stops change is determined by the random number P per [ which was stored in the storage ROM which consists of 55 coma from "0" to "54" ] common pattern. Probability is changed so that the hit probability of this common pattern may also be mentioned later here, and it is referred to as 33/55=3/5 at the time of high probability, and is referred to as 5/55=1/11 at the time of low ******. Furthermore, the hit probability of a pattern is specially combined with the hit probability of a pattern, when [ this ] the hit probability of a pattern is 1/200 (low probability) specially, hit probability of a pattern is usually set to three fifths (high probability), and when the hit probability of a pattern is 1/30 (high probability) specially, hit probability of a pattern is usually made into 1/11 (low probability). Such meaning mentions later.

[0041] And the contents memorized while the random number value from a random number P was usually elected per pattern when sphere detection was usually carried out by the starting switch per pattern at the time, the contents were memorized and the pattern display 10 usually carried out the change start are investigated, it hits

corresponding to the probability state, and HAZURE is determined. And in a hit, it hits, it usually determines a halt mode with the pattern random number Q, and will be in the state where one lit up even if there were little left red and right red either. In HAZURE, it will be in the state where only green Light Emitting Diode lit up inside.
[0042] Next, it explains per [ concerning the important section of this invention ] operation mode. As mentioned above, this invention is equipped with the probability renewal field 31 in the game face-of-a-board 1 top, and is usually characterized by the hit probability of a pattern, and renewing the hit probability of a pattern specially with the sphere passage to this hit probability renewal field 31.
[0043] here -- above -- specially -- the hit probability of a pattern -- 1/200 (low probability) -- hit probability of a pattern was usually set to three fifths (high probability) -- combining -- a pattern P1 -- specially -- the hit probability of a pattern -- 1/30 (high probability) -- hit probability of a pattern was usually made into 1/11 (low probability) -- it combines and the pattern P2 is set up For this reason, even if it is in which combination patterns P1 and P2, the last probability factor (1/200x3/5, 1/30x1/11) from opening of the electric accessory 15 usually to great success is almost equal, and is equated. However, if it combines and is in a pattern P1, while the open operation of the electric accessory 15 usually occurs frequently and the change frequency of Patterns A, B, and C becomes high specially with the inflow of the game sphere to the pattern starting field 14, the operation mode to which the probability that Patterns A, B, and C will serve as a great success mode specially becomes low will be generated. Moreover, if it is in the combination pattern P2, while the open operation of the electric accessory 15 is usually suppressed and the change frequency of Patterns A, B, and C becomes low specially, the operation mode to which the probability that Patterns A, B, and C will serve as a great success mode specially becomes high will be generated. And this operation mode will change with passage of the game sphere to the hit probability renewal field 31 from one side to another side. It **, and although the gains with which a game person is finally supplied do not differ, they can produce a big difference in progress until it is becoming it a great success, and can realize simply the game gestalt which was rich in change. Moreover, the operation which attracts the strategic game which took the passage timing to the hit probability renewal field 31 into consideration is produced.
[0044] It hits here, and lots are cast in the hit probability selection random number W, and you may make it select one of the combination patterns P1 and P2 by the lottery result with the sphere passage to the probability renewal field 31. If it is in this composition, since it is unknown which combination patterns P1 and P2 it becomes, a game person will pay attention to the lottery result, and it becomes impossible to look aside to advance of a pachinko game. Even if it furthermore prepares many combination patterns, it will be selected convenient.
[0045] In addition, even if a game sphere passes to the hit probability renewal field 31, you may make it a predetermined time (for example, 5 minutes) maintain the

probability, once probability changes. That is, the hit probability renewal field 31 is repealed in the meantime. Although the processing control by the central control unit CPU can perform invalid processing of this hit probability renewal field 31 A member 40 is arranged. the movable passage prevention which moves in the rectangular direction to the game face of a board on the entrance of the gate of the hit probability renewal field 31 as drawing 4 shows — After a **** carries out probability change, it is changed into a predetermined time and a projection position (closing position), and you may make it changed into an evacuation position (open position) after predetermined-time progress. this movable passage prevention — that it will be made to enable passage of the game sphere to the hit probability viewing area 31 if timing suits as other position control meanses of a member 40 as open position and a closing position are repeated for every predetermined time **** — an opening-and-closing random number — using — predetermined timing — an opening-and-closing random number — casting lots — the result — movable passage prevention — the composition of making it become any of advance and evacuation of a member 40 to be etc. is proposed As this predetermined timing, the mode of a pattern casting lots in an opening-and-closing random number, if the number of times of predetermined is changed is proposed specially.

[0046] By the way, although it hits and probability changes with game sphere passage of the probability renewal field 31 as mentioned above, the contents are displayed on the hit probability viewing area 30. A game person can carry out learning of the present probability state by this display, challenge volition is stimulated or various feeling, such as disappointment and impatience, is induced. What is necessary is to display only the hit probability of a pattern specially as these contents of a display, as drawing 1 shows. Or you may be made to carry out probability information by displaying a pattern name or displaying this using the sign corresponding to the combination patterns P1 and P2, and a character.

[0047] Although the above-mentioned example was explained per [ which selects two combination patterns P1 and P2 ] composition, it can be optionally increased by this kind. Moreover, specially, although the combination pattern of the hit probability of a pattern is usually renewed with the hit probability of a pattern, you may be the composition that only the hit probability of a pattern usually renewed only the hit probability of a pattern specially.

[0048]

[Effect of the Invention] this invention was mentioned above — as — a game face-of-a-board top — hitting — a probability renewal field — having — the sphere passage to this hit probability renewal field — following — a usual state — or since hit probability is renewed and the probability which is becoming it a great success changes with the lottery results of a hit probability selection random number at any time, the operation mode which was rich in change which stimulates the hope for great success is generated Moreover, caring about change of great success probability, a game person will perform a game and does not divert mind to advance

of a game.

[0049] Moreover, if it is in the composition which renewed hit probability for every sphere passage to a probability renewal field in a game face-of-a-board top, the strategic game which took the passage timing to a hit probability renewal field into consideration will be attracted.

[0050] Lots are cast in a hit probability selection random number with the sphere passage to a hit probability renewal field, and by the lottery result, if it is in the composition which selected hit probability, a game person produces the fun which cannot carry out learning of the selection result beforehand. Moreover, in providing much hit probability, by using the hit probability selection random number W, selection becomes possible and it becomes the optimal composition.

[0051] Moreover, when the hit probability viewing area which reports hit probability is arranged on the game face of a board, it is in each of this composition, and a game person can carry out learning of the present probability state, and challenge volition can be stimulated or he can induce various feeling, such as disappointment and impatience.

[0052] further -- again -- the entrance top of a hit probability renewal field -- a movable passage prevention member -- arranging -- movable passage prevention -- new game volition -- by the open position of a member, if it is in the composition which was made to enable game sphere passage to a hit probability renewal field, effective and invalid control of a hit probability renewal field are easy, and are specified by the game person, come out, and perform hit ball timing adjustment -- can be stimulated moreover, movable passage prevention -- it becomes realizable [ a new changeful game form ] by control of a member

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[Translation done.]


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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]
[Drawing 1] It is the front view of the game board 1.

[Drawing 2] It is the expansion front view of the pin center,large case 4.

[Drawing 3] It is the block circuit diagram showing a microcomputer.

[Drawing 4] movable passage prevention —— it had the member 40 —— it hits and is the front view of the probability renewal field 31

[Description of Notations]

1 Game Board

4 Pin Center,large Case

6 It is Pattern Display Specially.

22 Adjustable Winning–a–Prize Equipment

23 Adjustable Winning–a–Prize Mouth

30 Hit Probability Renewal Field

31 Hit Probability Viewing Area

40 Movable Passage Prevention —— Member

W Hit probability selection random number

[Translation done.]

* NOTICES *

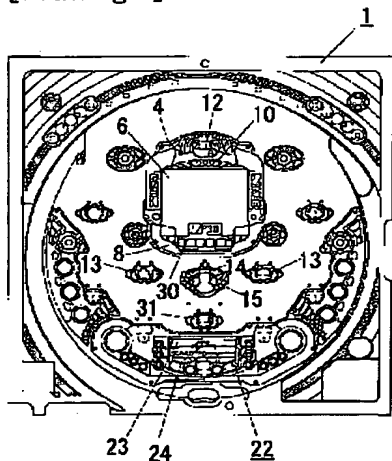Japan Patent Office is not responsible for any damages caused by the use of this translation.

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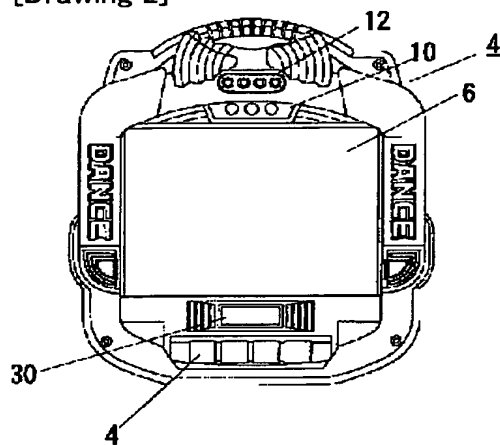
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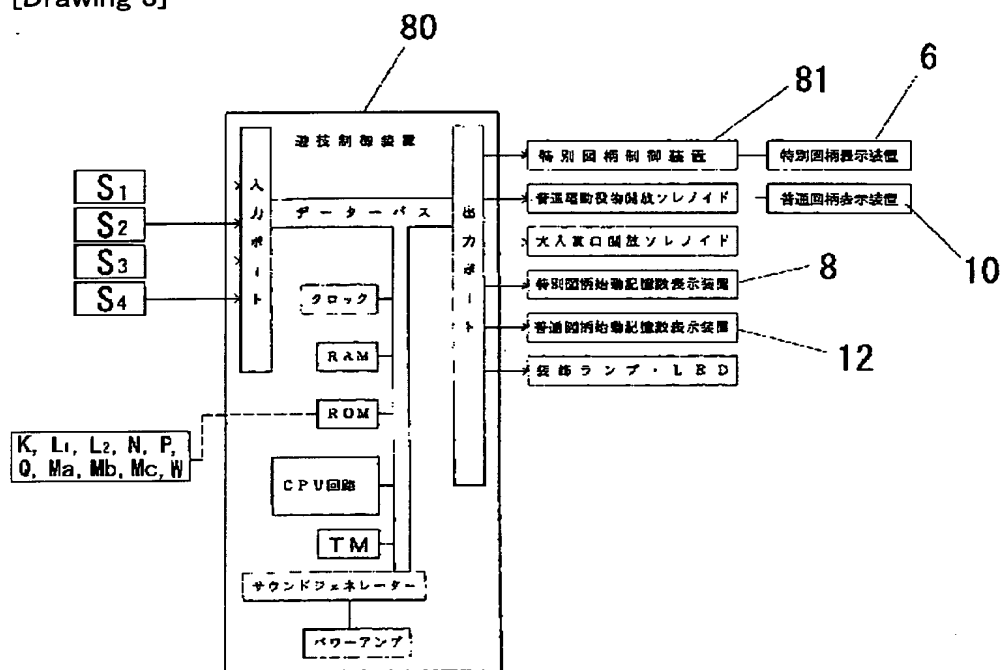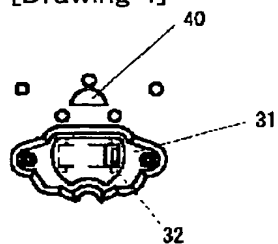3.In the drawings, any words are not translated.

DRAWINGS

[Drawing 1]

[Drawing 2]



[Drawing 3]



[Drawing 4]



[Translation done.]